



Montana Board of Environmental Review

P. O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • Website: www.deq.state.mt.us

BOARD OF ENVIRONMENTAL REVIEW OF THE STATE OF MONTANA

Minutes of public hearing/meeting on January 10, 2006, in Boulder, Montana, to consider the proposed amendment of ARM 17.24.116 to require a reclamation plan to conclusively demonstrate that, after the period of time allotted by 82-4-336(3), MCA, no treatment of surface or groundwater for carcinogens or toxins will be required to meet water quality standards at the point of discharge.

Call to Order

Chairman Russell called the public hearing to order at 10:05 a.m., on Tuesday, January 10, 2006, at the Fellowship Hall, Boulder, Montana.

Attendance

Board Members Present: Chairman Joseph Russell, Bill Rossbach, Gayle Skunkcap, Heidi Kaiser, Robin Shropshire, Kim Lacey, and Board Liaison Tom Livers.

Board members Absent: Don Marble

Board Attorney Present: Chris Busley, Assistant Attorney General, Agency Legal Services Bureau

Board Secretary Present: Joyce Wittenberg

Court Reporter Present: Yvonne Madsen

Department Personnel Present: Tom Livers (Board Liaison), Warren McCullough, Joyce Wittenberg (Board Secretary)

Interested Persons Present: See attached sign-in sheets.

Introduction by Chairman Russell

Chairman Russell summarized the notice, indicating that the Board of Environmental Review (BER) proposes to amend ARM 17.24.116 pertaining to the application requirements for an operating permit under the Metal Mine Reclamation Act. The amendment is proposed to ensure that water pollution is prevented and to implement the requirements that reclamation is completed within two years of completion of the mine. The rule would prohibit the use of perpetual water treatment to meet the water quality standards for toxins and carcinogens.

Chairman Russell stated that the Notice of Hearing (Notice No. 17-230) was published in 2005 Montana Administrative Register, Issue No. 17, pp. 1649-1651. The notice indicated that

interested persons could submit oral or written comments at the hearing or written comments to the BER by January 18, 2006.

Chairman Russell indicated that copies of the Notice of Public Hearings for the proposed amendment and Notice to the Presiding Officer forms were available on a table near the door and that anyone wanting to make a statement or submit written materials at the hearing should complete a Notice to the Presiding Officer form.

Chairman Russell read the Notice of Function of Administrative Rule Review Committee as required by Section 2-4-302(7)(a), MCA, and informed the persons at the hearing of the rulemaking interested persons list and the opportunity to be placed on that list as provided by Section 2-4-302(2)(a), MCA.

Finally, Chairman Russell provided the BER's legal authority to undertake the rulemaking and ground rules for the hearing.

Warren McCullough is the Bureau Chief of DEQ's Environmental Management Bureau. The proposed rule change is the result of a petition being submitted to the Board and DEQ is neutral in regard to adoption of the proposed rule change. The phrase "conclusively demonstrate" amounts to a guarantee that no treatment will be required. That may not be possible given the size and complexity and variability of mineralized systems and the small quantity of material that actually would be tested.

The two-year limit on treatment is in existing law, but is only invoked by DEQ when a mining company is nonresponsive. The provision in the proposed rule that DEQ may allow a longer time for treatment is also in current law. How much latitude the DEQ has in allowing a longer time is unclear. The rule proponents believe it to be a small amount of time.

DEQ performed an economic analysis of the proposed rule change. Economic impact is increased because there is not a grandfathering clause and because the proposed rule does not exclude nitrates that are used in blasting and are common at minesites. The economic analysis indicated that the proposed rule change would beneficially lower risk or prevent taxpayers from having to pay water costs in perpetuity if bonds are insufficient, improve water quality near affected mines and increase protection of the environment near future mining activity. The proposed rule change would negatively prevent 50-90 % of future mining economic output and 10-25% of future industrial mineral mining output. The mining sector comprises only one-and-a-half percent of the state's total economy, so this wouldn't be a huge impact. In certain counties, however, there would be major economic impacts. The proposed rules would result in 740-2600 jobs being lost, \$47-138 million in lost wages, \$84-543 million in lost economic output, and \$7.1-16.5 million in lost tax revenues.

Proponent

Matt Clifford is the conservation director and staff attorney for the Clark Fork Coalition. The Clark Fork Coalition spends a disproportionate amount of time trying to secure cleanup of abandoned mines, such as Beal Mountain, Mike Horse copper mine, and the Butte copper mines. In many cases, the mining companies go bankrupt and the water pollution problems created by the mine persist long after the company is gone. Bonding has proved inadequate. State and federal governments incur liability to address the pollution that, in many cases, cannot be adequately addressed.

The proposed rule change recognized that mining is unique in that it creates geological pollution that simply can't be turned off. Geology is exposed that, with precipitation, is a source of pollution for an indefinite period of time. Perpetual water treatment at minesites is unlike perpetual treatment at a wastewater plant, supported by a perpetual tax base.

Perpetual water treatment is not just required at cyanide heap leach gold mines, which can't be permitted under current law. The Beal Mountain mine requires perpetual water treatment for selenium leaching from waste rock.

The economic impact is overstated because it assumes the proposed rule change will apply to existing operations. This is not the intent of the authors of the proposed rule change. A grandfathering clause can certainly be added by amendment. Economic analysis often overlooks the economic impact of a decent natural environment. The Clark Fork River basin has a vibrant economy that is based on tourism, fishing and recreation industries, and because it is a place where people want to live.

The proposed rule change will not end mining as we know it. There is no absolute two-year limit on reclamation. Extensions of the reclamation period are routinely granted.

Opponents

Leo Berry is an attorney in Helena and participated in drafting the Metal Mine Reclamation Act (MMRA). His law firm was hired by the Montana Mining Association to evaluate whether the Board has legal authority to adopt the proposed rule change.

The delegates to the 1972 Constitutional Convention stated that the legislature is the proper body to implement the right to a clean and healthful environment. The legislature has done so by enacting the MMRA and the Water Quality Act. The BER cannot adopt the proposed rule changes to the extent the proposed changes conflict with these legislative acts. The purpose of the MMRA is to allow production of minerals to meet the needs of society and prevent foreclosure of future mining as well as to protect the environment. The proposed rule change is going to significantly prevent mining activity. Furthermore, the two-year time period for reclamation in the MMRA applies to surface grading and revegetation activities and does not have anything to do with water quality standards. The MMRA also provides for treatment of water prior to discharge after the mine is closed.

In addition to the problems associated with the phrase “conclusively demonstrate,” the definition of “treatment” is vague. Does treatment include an active lime treatment facility or a sediment basin?

Jim Keane is a state representative from Butte and is a business manager for the Operating Engineers in the State of Montana. He corrected a comment indicating there were 15 signatures on the economic petition. There are actually 30 signatures (15 Democrats and 15 Republicans).

For the first two sessions he served in the legislature, the State was facing a huge economic deficit. Currently, the State is awash in cash because of resource industries, such as the oil industry. Because the economy of mining has turned around, there is exploration and the potential for new tax revenue sources such as at Bernice.

The proposed rule change unfairly applies to only the mining industry. Water quality regulations should apply across the board. Rather than protect the water resource, the proposed rule change stops active mining in the state.

John Esp is a state senator and his testimony was read into the record by Scott Mendenhall. The citizens of Sweetgrass and Stillwater Counties, state and federal regulators, and the Stillwater Mine have worked together to address environmental concerns without the need for heavy-handed regulations such as the proposed rule changes. Stillwater and Sweetgrass Counties are among the leaders in per capita income and per capita income gain because of the stable and well-paying jobs at the Stillwater Mine. The mine is a major contributor to the tax base in our counties and schools. Other communities should not be denied the same success.

Scott Mendenhall is a state representative from Jefferson County. The proposed rule change is outside the BER’s purview. The proposed rule making is a substantive policy change that should be made by the legislature. The proposed rule change is very narrowly aimed at one industry. As discussed by other commentators, it is technically flawed which will lead to litigation. The proposed rule change would have dire consequences for Jefferson County. There are two active gold mines in the county that comprise 30% of the tax base and employ hundreds of workers.

John Ward is a representative of House District 84, which extends from Craig to Clearwater Junction. The intent of the proposed rule change is to tie up any future possibility of mining in litigation. The proposed rule usurps the role of the legislature. Except for one commentator, there are no proponents of the proposed rule change present. They are all going to show up at the hearing in Fort Belknap so that they will be the last testimony received by the BER.

Tom Lythgoe is a commissioner in Jefferson County. The proposed rulemaking should not be considered. The economic impact statement developed by DEQ indicates that 1.5 % of Montana’s total economy is related to mining. The legislature should be taking steps to increase that number. The taxable market value of the two mines in Jefferson County is \$129 million. In order to replace that market value, Jefferson County would have to build 9030 homes, 20 Home Depots, 240 Townpumps, 1612 Elkhorn Cafes, or 269 Montana City Grills.

In regard to the 9030 homes, for every \$1 dollar received in taxes, \$2.16 worth of services are demanded. For every dollar that Golden Sunlight and Montana Tunnels pay in taxes, they demand 5 cents in services.

Ken Weber is a commissioner in Jefferson County. Jefferson County is one of the fastest growing counties in the State. The best way to manage the growth is through the industrial tax base. Having a place where people want to live and mining are not mutually exclusive. Jefferson County is a prime example of an area built on mining with a fast growing residential population.

It is very shortsighted to limit the time an industry may treat water. Water quality standards usually change during the life of a mine. It is better to have water treatment in perpetuity during which water quality standards can be revised than to have an mine operation leave with water not meeting new water quality standards.

Jack Ross is a state representative from House District 60, which includes all or part of Stillwater, Sweetgrass and Carbon Counties and is home to the Stillwater Mine. The BER, which is part of the executive branch, does not have the authority to amend the rule, which is the purview of the legislative branch. Mining will never reach its full potential if we are looking backwards at the Berkeley Pit and Zortman/Landusky. We should look forward, having rules in place for a safe and healthful environment.

Bruce Gilbert is the Director of Environmental and Governmental Affairs at Stillwater Mining that mines platinum group metals. Platinum group metals are used in clean air technologies, catalytic converters, high tech electronics, satellite systems, dental and medical applications, and fuel cell technology. Stillwater Mine has implemented technologically advanced treatment systems for nitrates, a product of blasting. Nitrates are treated through a state-of-the-art biological unification system and land application systems.

The proposed rule changes affect Stillwater Mine and potentially limits its ability to do business in Montana. Stillwater Mine employs 1600 workers with an overall annual payroll of \$100 million. It invests \$300 million annually in outside goods and services, over \$50 million in Montana. Stillwater Mine contributes \$10 million annually to state and local taxes and contributes \$7 million annually in impact fees for local counties and governments to deal with social impacts of mining.

The proposed rule changes would apply to Stillwater Mines because it doesn't exclude nitrates. Although it may affect current operations or expansions of those operations, it also may prevent other mines from operating to extract ore from the 28-mile long ore body.

Don Serba is the president of the Western Environmental Trade Association. The Western Environmental Trade Association unites individuals, businesses, industries and organizations to promote economic opportunity, environmentally responsible economic growth and good family wage jobs.

The Western Environmental Trade Association does not believe the proposed rule change improves Montana's water quality. The proposed rule change is a legislative matter and not a

question for the BER. Compliance at the point of discharge is a major policy shift from the current regulations based on compliance with water quality standards in receiving waters and conflicts with federal and state mining and reclamation requirements.

The adoption of the proposed rule change would be devastating to the mining industry and the threat of overregulation would have a ripple effect on other industries. As natural resource industries have been pushed out of the state, its per capita income has gone down. The proposed rule changes are another attempt to continue to destroy the mining industry in Montana.

Paul Babb is the chief executive of Butte-Silver Bow and represents Butte-Silver Bow local government. It opposes the proposed rule changes and believes the proposed changes should be brought to the legislature rather than the BER.

The mining industry contributes \$360 million annually in direct economic gain to Montana, employs over 620 residents in the Butte area, and contributes over \$15.6 million to the treasury of Butte-Silver Bow and the State of Montana.

John Konzen is a commissioner in Lincoln County. Lincoln and Sanders County commissioners do not support the proposed rule changes. The current rules provide necessary tools for DEQ to make necessary and specific determinations for mine permitting.

The Troy Mine located in Lincoln County is one of the premier mines when it comes to water treatment. There has been no impact in the watershed during the 25 years the mine has operated. The proposed rule making targets two new mines proposed in the area---one proposed by Mines Management south of Libby and the Rock Creek Project proposed by Revett Mine.

Marko Lucich is the executive director of the Butte Chamber of Commerce. Metal mine jobs are very high paying compared to average wages and employ approximately 351 individuals in Butte-Silver Bow, paying an average salary of \$53,000. A loss of these jobs would be devastating. Mining contributes approximately \$1.4 million in tax revenue.

Rick Orizotti is an attorney in Butte and represents Mines Management, Inc. Mines Management initiated repermitting of the Montanore Project in Lincoln County in 2004. The project will entail \$350 million in investment capital, \$100 million in capital expenditure over the life of the mine, employ 700 workers in the construction phase and 250-350 workers during production, have an annual payroll of \$10 million and annually pay \$5 million in county taxes.

Although the Monanore Project does not anticipate any water discharge upon closure, Mines Management is concerned that DEQ would not be able to permit the project because of the “conclusively demonstrate” language.

DEQ and other federal and state agencies currently have effective regulatory tools relating to water quality and reclamation. Both the Montana Legislature and the Montana Supreme Court have expressly declared mining to be an activity essential to the state of Montana. The mining industry cannot operate in a ever-changing regulatory environment where proposed rules undermine established laws.

Jeff Levell is a geologist at Montana Tunnels Mine. The proposed rule changes are an effort to get rid of mining that is hypocritical given the use of metals in every day life. Several members of the BER are members of MEIC that is proposing the rule changes. An ethical conflict of interest exists for those members to vote on the proposed rule change.

Bill Thompson is a principal and senior hydrogeologist with Hydrometrics. Because mines are located in complex hydrologic settings and the two-year time frame is unrealistically short, it is unlikely mines will be able to “conclusively demonstrate” that water quality compliance could be achieved without treatment. DEQ would be making a subjective decision as to whether analysis is sufficiently conclusive and would be subject to legal challenge. The rule change would also preclude DEQ from requiring long-term treatment as a contingency and bond accordingly.

The proposed rule change does not define treatment. Treatment can include settling, infiltration, evaporation, land application and other passive treatment techniques. The two-year time frame is insufficient. It takes more than two years to establish vegetation, during which collection of runoff is required, which is “treatment.” Because nitrogen is considered toxic, even septic systems could pose compliance problems. DEQ would be placed in a position of making routine exemptions.

Existing standards require compliance with water quality standards in the receiving water. The proposed rule change requires compliance at the point of discharge. This is a major change in policy. A mine would have to meet water quality standards within two years within waste rock dumps and tailings impoundments and groundwater workings without regard for the actual potential for that water to influence surface water or groundwater. It would effectively preclude the mixing zone provisions from being applied to mining. Even the most environmentally sensitive mines would have trouble adequately demonstrating compliance under the proposed rule change.

Barbara Ranf represents the Montana Chamber of Commerce. We need to be working together to find ways to encourage responsible development of all sectors of the economy, including mining.

Corby Anderson has a Master’s and Ph.D. in metallurgical engineering and has 27 years of experience in mining. The proposed rule changes set an unachievable standard to propagate a political agenda. Like I-147, its agenda is to stop mining. Mining should not be held to a different and unrealistic standard. Like mining, discharges from metro sewers and fields that have been fertilized contain nitrogen. They are not, however, regulated. The real issue is bonding. Productive mines have to be bonded properly.

Ed Handl lives in Jefferson County and is a registered PE and advises Jefferson County on environmental issues related to mining. The proposed rule change illogically addresses water quality at the point of discharge. Current water quality standards are defined by allowable concentrations of specific well-defined chemicals or metals. The proposed rule defines water quality standards by the broad terminology of toxins or carcinogens. Many materials can be

toxic or carcinogenic in sufficient dosages. Therefore, defining “toxin” or “carcinogen” is problematic.

The real problem is not water treatment technology but the financial assurances that have been provided to ensure water treatment is accomplished. Mining companies paid \$137 million in taxes annually. Maybe some of these tax dollars should be used to create a trust fund for long-term water treatment.

The valuable tool of water treatment should not be removed from the toolbox. We should learn from past mistakes, put that knowledge to use and move forward.

Tadd Dale is the vice-president of human resources at Montana Resources. 350 employees make their living from the Continental Pit in Butte. Montana Resources’ payroll exceeds \$1 million a month. The 2004, 2005 gross proceeds, metal mine and property taxes paid to Butte-Silver Bow and the State are \$15.7 million. Since 2003, Montana Resources has invested \$145,000 for each job that has been created. The intent of the proposed rule change is to hinder present mining and stop future mining.

Tom Harrington works with the Jefferson Development Corporation and represents the community transition advisory group that works with Golden Sunlight on their sustainability program. Jefferson County relies on extractive industry for jobs and a tax base. The proposed rule change could end mine-related exploration activities and may preclude expansion of existing mines. The proposed rule change is very personal to the residents of Jefferson County because it affects their livelihood. The proposed rule changes could reinforce the perception that Montana has an unfavorable mining climate.

John Eyde represents Pioneer Equipment in Butte. Montana Resources does business with Pioneer Equipment and MEIC does not.

Darrell Miller is the chairman of the Montana Tunnels Advisory Group, which recognizes the contributions of Montana Tunnels to area communities and is committed to promoting the continued development of environmentally conscious mining operations. The proposed rule change goes beyond the BER’s authority. Montana’s right to a clean and healthful environment is already protected through the Montana Metal Mine Reclamation Act and the Water Quality Act. Other communities should have the same opportunity to experience the social and economic benefits enjoyed by communities in Jefferson County that have been provided by mining.

John Beaudry is the public affairs manager for Stillwater Mining Company and prior to that, was the planning director for Stillwater County. Stillwater Mining Company has over 1600 full-time employees. The socioeconomic impact of Stillwater Mining has been nothing but positive for over 20 years. Stillwater Mining Company opposes the proposed rule change.

John Parks is the environmental manager for Barretts Minerals in Dillon and represents the talc industry in southwestern Montana. Talc has been mined in Beaverhead County for more than 50 years in an environmentally responsible manner. Barretts Minerals has budgeted \$8.5 million in

wages and benefits and \$5 million in capital improvements. If the proposed rule change is adopted, Barretts Minerals may not have the same incentive to invest in the operations.

Barry Moore is employed by Moore Oil. Sanders and Lincoln Counties have experienced a 25-year decline in basic industry. There are very few jobs now in the area that provide a good living. Tourism, which only takes place during four months of the year, is no replacement for the mining industry. The proposed rule change is the most recent attempt to prevent mining by continually changing the applicable regulations.

Dustin Stewart represents the Montana Mining Association. He presented written testimony from Resource Management and Geomatrix and letters from legislators and county commissioners opposing the proposed rule change.

Employees of the mining industry earn wages that are twice the amount of the average wage in Montana. The mining companies associated with the Montana Mining Association represent \$135 million plus payroll and do a substantial amount of business with over 700 vendors in Montana. The proposed rule change is outside the authority of the BER and belongs to the legislature. The historic mining mistakes that are the reason for the proposed rule change cannot be committed today. Mines currently being operated have very large bonds and have benefited from drastic technological changes in the industry. The state legislature has acted to make sure past mining mistakes don't happen again.

Tim Smith is the general manager of Montana Tunnels that has provided an average wage of \$15 million over the two decades it has been in production. Montana Tunnels has annually contributed \$1.2 million in county and state taxes and in 2005, spent \$28 million for supplies from several hundred businesses in fifteen counties. It has created over one billion dollars work of wealth from its four metal products (gold, silver, lead, zinc).

At the time of its initial permitting, geochemical static test work conclusively demonstrated acid-generating potential in waste rock. Kinetic testing over the last 19 years has demonstrated the rock is not acid generating. Upon shutdown, Montana Tunnels will rely on natural processes for water treatment, such as land exchange and precipitation. Depending on how "treatment" is defined, Montana Tunnels may not be compliant with the proposed rule. The proposed rule is an unnecessary restriction with the intent to eliminate mining from Montana.

John Schaefer is the environmental manager at Montana Tunnels. The proposed rule will not in itself create a more clean and healthful environment because other regulations already in place and bonding take care of that. The proposed rule will have a significant impact on long-term cultural health of communities across Montana. The proposed rule is not based on science but on a social-political agenda promoted by anti-mining and anti-resource development interests.

The United States is the largest consumer of goods and services and requires more mine products per capita than any other country. The position that mines in other countries should sustain our consumption takes no ethical global responsibility.

Montana is going to exceed one billion dollars in exports this year. Of that amount, \$200 million is from mineral exports. This country does not have the smelting facilities to reduce the concentrates down to metal, so the concentrates are shipped to China, Japan, Korea and Canada.

Zortman/Landusky and Beal Mountain are frequently used as examples for taxpayers having to foot the bill for mine reclamation. Their reclamation bonds may have been more adequate. A significant portion of the Zortman/Landusky bond was reduced because it did not fit the reclamation plan line by line. A portion of the Beal Mountain bond was spent unnecessarily on attempts to remove thiocyanate that ended up being reduced naturally.

Mark Itso is the general manager at Golden Sunlight Mines. “Conclusively demonstrate” is a problematic term. Golden Sunlight has been dealing with the issue of how to close the pit for twenty-three years and has spent one million dollars in the last three years studying that one issue. Golden Sunlight will never be able to “conclusively” demonstrate that a closure plan meets everyone’s expectation. Jeff Barber and Jim Kuipers agree there is no definition of “conclusively demonstrate” that scientific people would ever agree on.

The term “treatment” is also problematic. Jeff Barber and Jim Kuipers believe “treatment” includes anything that affects water. A drop of impacted water coming out of a waste rock dump that is attenuated when it hits virgin soil would be considered treatment.

While Jeff Barber and Jim Kuipers have stated the intent of the proposed rule is not to have it apply to existing operations. They have not put that language in the proposed rule.

If the proposed rule is passed, Golden Sunlight would not be able to proceed with a second phase of underground mining. The mine would also lose any incentive for mineral exploration.

Fess Foster is a geological and environmental consultant. He has conducted mineral exploration in Montana for almost 30 years. He is currently working for an exploration company that has been exploring in the state for 20 years. It spends two-thirds of its budget on Montana contractors and businesses and last year contracted with over 50 different people from southwestern Montana. If the proposed rule is adopted, there’s not going to be any reason for continued mineral exploration.

Robin McCulloch is a mining engineer for the Montana Bureau of Mines and Geology. Montana has great, untapped mineral potential, including 10-12 Troy-type deposits, 7-10 Montana Tunnel size deposits, a nickel/copper cobalt deposit parallel to the Stillwater reef, and underground resources in Butte that exceed the surface production. While Montana has a huge mineral potential, its reputation for an unstable government and unpredictable regulations have made it difficult for companies to raise capital and invest within the state.

A lot of advances have been made since the last mine was permitted in Montana in 1989. Reliable predictive techniques to anticipate acid mine drainage have been developed, the presence of more elements such as thallium are being tested for, and mine dump design has been developed to prevent acid mine drainage. Mining methods and concurrent reclamation

techniques have been developed to reduce the footprint of disturbance. Reclamation is not part of the mining process.

Poor water quality naturally occurs throughout the state, including zinc in northeastern Montana, uranium in the public water supply of Rapelje and the Helena and Clancy areas, and arsenic in the Missouri and Yellowstone Rivers from Yellowstone Park. If a mine treats water after closure, it may be the only clean water in the drainage.

Paul Kukay is the environmental manager at the Troy mine. The current water quality and reclamation bonding laws are more than adequate to protect water quality. The proposed rule's two-year limit on reclamation and water treatment is arbitrary. Some projects are more environmentally complex and require different time frames.

The Troy Mine does not have acid rock drainage problems. The current water quality laws in Montana require some type of water treatment, either passive or active, before water can be discharged from an active mine. The Troy mine could not be permitted under the proposed rule because it was in a care and maintenance status for 11 years during which natural treatment of mine water occurred.

Martin Johnson has worked for Golden Sunlight for nineteen years. During the entire time, MEIC has been trying to shut it down using lawsuits, appeals and attempts to pass legislation designed to put it out of business. He is skeptical of everything MEIC says, including its representations that the proposed rule does not affect existing mines and that the intent of the proposed rule is to protect water quality as compared to ending mining. He distrusts MEIC's representation that an extension of the two-year treatment period can always be granted by DEQ because the application for a permit has to conclusively demonstrate that water will not need to be treated for more than two years.

John Patritti has worked for Golden Sunlight for seventeen years. The proposed rule is not rational and is another way for MEIC to try to stop mining in Montana.

Jeff Janacaro has worked for Golden Sunlight for twenty-two years. Golden Sunlight does not release any water but recycles all of the water on the plant site. No mine can meet the requirements of the proposed rule. Requiring mining to stop all water treatment after two years is bad for mining and the environment.

Gilbert Uehling moved to Montana in 1981 and has had children that had to leave the state for job opportunities. The proposed rule is trying to do away with jobs. The BER should consider the miners and the miners' families in making its decision.

Chairman Russell then concluded the public hearing.

Minutes of public hearing/meeting held on January 11, 2006, in Fort Belknap, Montana, to consider the proposed amendment of ARM 17.24.116 to require a reclamation plan to conclusively demonstrate that, after the period of time allotted by 82-4-336(3), MCA, no treatment of surface or groundwater for carcinogens or toxins will be required to meet water quality standards at the point of discharge.

Call to Order

Chairman Russell called the public hearing to order at 10:30 a.m., on Wednesday, January 11, 2006, at the Fort Belknap Bingo Hall, Fort Belknap, Montana.

Attendance

Board Members Present: Chairman Joseph Russell, Bill Rossbach, Heidi Kaiser, Don Marble, Gayle Skunkcap, Kim Lacey, Robin Shropshire, and Board Liaison Tom Livers.

Board members Absent: None

Board Attorney Present: Chris Busley, Assistant Attorney General, Agency Legal Services Bureau

Board Secretary Present: Joyce Wittenberg

Court Reporter Present: Cheryl Romsa

Department Personnel Present: Board Liaison Tom Livers

Interested Persons Present: See attached sign-in sheets.

Welcome and Prayer by Council President Julia Doney

Introduction by Chairman Russell

Chairman Russell summarized the notice, indicating that the amendment is proposed to prevent water pollution and to implement the requirement that reclamation be completed within two years of completion of mining. The proposed amendment would prohibit the use of perpetual water treatment to meet water quality standards for toxins and carcinogens.

Chairman Russell stated that Notice of Hearing (Notice No. 17-230) was published in 2005 Montana Administrative Register, Issue No. 17, pp. 1649-1651. The notice indicated that interested persons could submit oral or written comments at the hearing or written comments to the BER by January 18, 2006.

Chairman Russell indicated that copies of the Notice of Public Hearings for the proposed amendment and Notice to the Presiding Officer forms were available on a table near the back

door and that anyone wanting to make a statement or submit written materials should complete a Notice to the Presiding Officer form.

Chairman Russell read the Notice of Function of Administrative Rule Review Committee as required by Section 2-4-302(7)(a), MCA, and informed the persons at the hearing of the rulemaking interested persons list and the opportunity to be placed on that list as provided by Section 2-4-302(2)(a), MCA.

Finally, Chairman Russell provided the BER's legal authority to undertake the rulemaking and ground rules for the hearing.

Tom Livers is the BER liason for the Department of Environmental Quality. The Montana Environmental Information Center (MEIC) and the Fort Belknap Indian Community Council submitted a petition to the BER requesting a new subsection be added to ARM 17.24.116. The BER initiated rulemaking based on receipt of the petition. At the request of legislators, DEQ completed an economic analysis of the proposed rule change. The comment period on the rulemaking ends on January 18, 2006.

DEQ is neutral in the proposed rulemaking, although it has concerns regarding some of the proposed language. The phrase "conclusively demonstrate" is legally interpreted as a guarantee that no treatment be required. Such a showing will be difficult for complex mining activities. The proposed rule amendment does not include a grandfathering provision, so it will be applicable to all mining activities.

DEQ's economic analysis indicates that the proposed amendment would improve water quality near affected mines, increase protection of the environment from future mining activities, and significantly lower risk for taxpayers of funding potential water treatment. The economic analysis estimates that the proposed amendment would prevent 50-90% of future metal mining economic output and 10-25% of future industrial mining economic output and result in a corresponding loss of 740-2600 jobs.

Jeff Barber represents MEIC. He incorrectly assumed that MEIC would be able to present technical testimony at the February 3, 2006, meeting. MEIC will, therefore, present much of its technical testimony in written comments.

The intent of the proposed rulemaking is not to apply the rule change to existing operations. Golden Sunlight is already permitted for perpetual water treatment and taking back that permit authorization won't work. Although Mr. Barber disagreed with DEQ's position that the proposed rulemaking applied to all mining activity, he understood the basis for DEQ's interpretation. He urged BER to adopt a date-specific grandfather clause. The inclusion of the grandfather clause would undermine a major assumption used by DEQ in its economic analysis.

BER has authority to adopt rules from time to time to implement the Metal Mine Reclamation Act pursuant to Section 82-4-321, MCA. MEIC does not believe that the proposed amendment conflicts with provisions of the Metal Mine Reclamation Act. Section 82-4-336(7)(b), MCA, allows water treatment. This provision, however, applies during operation of the mine and

implementation of the reclamation plan. The proposed amendment applies after reclamation is completed.

The two-year time limit in the proposed rulemaking does not change any current requirement. It only references the requirement in Section 82-4-336(3), MCA, that reclamation to be completed within two years of completion or abandonment of the operation. The two-year time limit is not a hard and fast rule.

Everyone is pretty clear on what the phrase “conclusively demonstrate” means. The applicant must produce pretty good evidence that perpetual treatment of water will not be needed. The phrase “clear and convincing evidence,” which is a slightly lesser standard and has a legal definition, works almost as well. Mr. Barber provided a draft of the proposed amendment adding a grandfather clause and substituting the phrase “clear and convincing evidence.”

State and federal governments have spent \$20.5 million to reclaim Zortman/Landusky including perpetual water treatment. At the Kendall Mine, there was not enough money to produce an EIS and to implement a reclamation plan. Reclamation at Beal Mountain has not had intended results. Perpetual water treatment issues also exist at Basin Creek. There are going to be problems at Golden Sunlight, which also requires perpetual water treatment. It is poor policy for the State to continue permitting operations that cause perpetual water pollution that will potentially put the taxpayers on the hook for funding.

Jonathan Windy Boy is a state representative whose district includes the Fort Belknap Reservation and Zortman/Landusky. The proposed amendment would set up a check-and-balance system for the State that would avoid future Zortman/Landusky’s.

In the last session, the Legislature set up a trust fund that will receive \$17 million (\$1.2 million per year) by 2018 to fund long term water treatment at Zortman/Landusky.

If the proposed amendment is adopted, Mr. Windy Boy will consider introducing legislation in the next legislative session overruling the amendment.

Arlo Skari is a farmer and rancher near Chester and president of the Sweet Grass Hills Protective Association. After it was formed, association members visited Zortman/Landusky and Golden Sunlight and determined they did not want that in the Sweet Grass Hills. The idea of perpetuity can be looked at in two ways. It is certain that pollution will be left in perpetuity after mining. It is not certain that the funding to treat the water will last in perpetuity. The proposed rule amendment will prohibit some mines that shouldn’t be developed. We should not rely on other countries where there are no regulations for our future source of minerals. We need to get on a more sustainable basis.

Kenneth Helgeson is the president of Island Mountain Protectors and initiated the court action against Pegasus. The State and BLM has spent \$28-30 million reclaiming the site. The Army Corps of Engineers spent \$2 million to clean up King Creek and is worse than before. The biotreatment plant should not have been built because it is not feasible in our climate. He believes the biotreatment plant is an example of industry using the bond money to further its own

interests in developing biotreatment technology. It is difficult to change mining laws because industry is rubbing shoulders with politicians and regulating agencies.

Catherine Halver is the vice president of Island Mountain Protectors. Members of Island Mountain Protectors live in the southern part of the reservation near the Pegasus mine. When the mine was in the planning stage, members went to many meetings to get information on the mine. The members could not get answers to many of their questions, including whether there would be long-term pollution or impacts to water. Pegasus eventually went bankrupt. Area residents were left feeling the impacts. Some of the creeks flowing onto the reservation are not drinkable. Most residents buy water for daily needs.

Mert Freyholtz is from Gilford, Montana, and opposed the Zortman/Landusky mine from the beginning. A grandfather clause should not be added to the proposed rulemaking because mine operations should not be able to continue doing something that is wrong. Industry should be distrusted because industry will do anything to make money.

Will Patric is from Bozeman and became familiar with the Zortman/Landusky mine through work with the Mineral Policy Center, a national nonprofit organization confronting mine-related problems. The tribal council expressed concern about the mines impact on the Little Rocky Mountains prior to permitting of the mine. The mountains played a vital role in the culture of the tribe. The tribal council raised concerns about limited environmental studies, lack of understanding of ground water flows and lack of a reclamation plan. The mine, however, was developed and was allowed to greatly expand despite having a history of mishandling cyanide process water and the development of acid mine drainage.

The Zortman/Landusky Mine is the worst example of modern hard rock mining. It demonstrates that the State has a difficult time saying “no” to any hard rock mining activity. If a mine proposal calls for extended water treatment from the start, that is a red flag and the project should be halted until the proponent can come up with a better plan.

Bonnie Gestring works for the Mineral Policy Center. The Mineral Policy Center has worked with the Fort Belknap tribes to address reclamation and long-term water problems at Zortman/Landusky and with landowners near the Kendall mine on the same issues. The proposed rule change sets good environmental policy to protect water resources and good fiscal policy to protect taxpayers from further liability.

The Metal Mine Reclamation Act requires reclamation plans to provide sufficient measures “to prevent pollution of air and water,” not to clean up after the fact. A shocking number of mines in the state have caused extensive harm to the water resources requiring treatment in perpetuity, including Zortman/Landusky, Beal Mountain and the Kendall Mine. Despite the resulting financial liability to the state, the permitting of mines has not changed. The Rock Creek mine has been permitted to require water treatment in perpetuity.

It is time for a proactive approach to mine-permitting. Mines need to be permitted up front to prevent water pollution in perpetuity.

John Allen is a Tribal Council member of Fort Belknap and president of the Buffalo Chaser Society, an organization that preserves native culture and spiritual ways. As a spiritual leader, he has put on approximately 20 sun dances in the Little Rocky Mountain area.

Despite being in a poverty state, the tribal community voted down a referendum regarding mining. The Little Rocky Mountains are very important to the tribe, historically providing a source of water, lodge poles, food and game, fasting sites, and medicine. The Assiniboiné and Gros Ventre tribes have petitioned the BER to make the proposed rule amendment because they are very concerned about future generations of tribal members and residents of surrounding communities dealing with water that needs treatment in perpetuity. The following facts support the proposed rulemaking:

1. Protection of the environment for future generations
2. Protection of taxpayers from funding perpetuity water treatment
3. Improve water quality in streams for future generations
4. Rule amendments only apply to future mines
5. Exemption of existing mines complying with proposed rule amendment
6. Lack of understanding of hydrology and chemistry at the mine sites
7. Cyanide leaching in mountainous terrain is fairly new technology
8. 10 of 13 existing gold mines in Montana will require water treatment in perpetuity
9. Cyanide leaching banned in Montana due to detrimental impacts to the environment
10. Mining companies need to be held accountable for perpetual water treatment
11. The Zortman/Landusky mines operate under no MPDES permit

Jim Main, Sr. is a member of the White Clay nation, formerly called the Gros Ventres. Mr. Main related the history of the Indian community during white settlement of the west, including treaty negotiations, the killing off of the buffalo, the dispossession of Indian land, and the beginning of the Landusky mine. He also discussed the Indigenous Environmental Network and the International Indian Treaty Council that deals with treaties and human rights.

The Indian community is owed good water. Water is life for all living things. The proposed rule change will put restrictions on mining.

Jonathan Windy Boy was asked to provide information on the Madison Formation by Board member Skunkcap. The Madison Formation consists of an aquifer far below the surface and covers half to two-thirds of the State. It is known as some of the purest water in the world. If the Madison Formation aquifer ever gets polluted, that would be the end of humankind. The proposed rule has a direct impact on preventing pollution of the Madison Formation.

Julie King Kulbeck is the secretary-treasurer of the Fort Belknap Indian Community Council. Ms. Kulbeck read from an affidavit prepared by Virgil F. McConnell in 1990. In the affidavit, Mr. McConnell indicted that he was raised with the religious convictions and beliefs of traditional Native Americans of the area. The ceremonies and beliefs include fasting, also known as vision questing. Mr. McConnell described the process of vision questing and the loss of vision questing sites due to mining. He also described the use of plants for healing purposes and his concern about the destruction of plants by mining operations. Finally, he described the

condition of a creek that arises in part from the tailings of mining operations. After a rain and during spring snowmelt, the creek turns yellow. The creek flows past the powwow grounds and children play in the water. Ms. Kulbeck read from the affidavit to demonstrate tribal members have been fighting to protect the water resource for many years.

Harold Jiggs Main is a member of the White Clay Society and a past Tribal Council member. Although it hasn't been proven to be mine-related, since mining began there has been an increase in skin rashes, thyroid problems, heart problems and other health issues. In the mid 1970's, tribal members who expressed concern about the effects of mining on health were not taken seriously. Hopefully, that has changed with a tribal member on BER and in state government. The tribes have always expressed the importance of safe drinking water. Pegasus was dealt with too lightly in the consent decree that resolved the lawsuits filed by the tribes. The agencies have failed the tribes in carrying out their trust responsibilities.

Dean Stiffarm is a member of the Gros Ventre tribe. When the Pegasus mine was first permitted, all that the state and federal governments saw were dollars. They didn't see the big picture. The tribes are co-petitioners of the proposed amendment so that other communities and reservations do not have to go through the same struggles that the Fort Belknap community has gone through with Pegasus. Some water flowing onto the reservation is blood red. He will submit photographs to the BER.

Liz McClain is a professor at the Fort Belknap College. When Pegasus first started using cyanide heap leach technology, the tribal community opposed it on spiritual, cultural and scientific grounds. At that time, the hydrology was unknown as it still is today. The tribal community takes the water resource seriously, as demonstrated by the fact that the area gave rise to the U.S. Supreme Court case establishing indigenous water rights.

For two years, an aquatic study has been conducted at the Fort Belknap College that has been very revealing as to the condition of Swift Gulch. Labs that are located out of the state were also used in the study; labs within Montana are not trusted. One of the tests conducted is called a static toxicity test. It uses daphnia to determine toxicity. None of the daphnia lived 24 hours. The water treatment being conducted at Zortman/Landusky is just cycling, it is not treatment. Sediment samples from Montana Gulch indicate that heavy metals are just now leaching into the sediment. A copy of the data will be given to the BER.

Dr. McCain cautioned the BER not to be held hostage by a concern over losing mining jobs. She also was concerned that the BERs distance from the Little Rocky Mountains may cause its responsibility to be abdicated.

Tina Has Eagle is a member of the Fort Belknap Indian Community Council. When her son was three years old, he went wading in King Creek and his feet started burning. Although she ran cold water over his feet, his discomfort was not relieved. She then brought her son to the Fort Belknap Hospital where silvadene cream was applied to the burns. He still has scars from the cyanide that was in the water. She has also seen wildlife that are sickly because of the mine.

Rose Maria Main has been familiar with the Zortman/Landusky mine since its inception. It was the first mine to use that method of mining and nobody knew what the effects were going to be. The tribal community has proved what the effects are. She acknowledged that there has not been a scientific link, but she believes the tribal community's high incidence of cancers, thyroid problems, suicides, heart problems and diabetes are caused by the mining. While the mine brought jobs to the area, it didn't change the unemployment rate on the reservation. It didn't change their economic status, but changed their health and entire ecosystem.

Delores Plumage is a member of the Salish and Kootenai tribes but has lived on the Fort Belknap reservation for 30 years. Although Native Americans hold some positions in government, they need the non-Indian's assistance to change the economic, power-based system. The Indian community needs BER's influence for the tribes to be heard and to truly make changes.

Having water as a commodity on the reservation is difficult. There is only one grocery store in Harlem and it is not unusual for it to run out of bottled water. When that occurs, residents have to go to Havre, which presents an economic challenge.

Protecting water quality is not an Indian problem, but is a challenge for all residents of Montana. Publicity regarding the poor water quality because of Zortman/Landusky could affect Montana's image as a whole.

While the eastern part of the state needs economic development, that is not a reason to lower standards.

Donna Young is an instructor at the Fort Belknap College teaching water quality. Her sampling techniques course sampled water in the Snake Butte reservoir and spring which she will discuss in written comments. In addition to the water quality issue, the land issue should be addressed. The soil in reclaimed areas is not healthy. What biomass there is to release nutrients into the soil to be reused by other plants is locked up. The reclaimed soil is mostly rock. In the future, plants may be collected in drainages to see if they are pulling heavy metals out of the water.

Council President Julia Doney indicated that the Fort Belknap Indian community wanted to help other communities across the state so that they do not face the same problems. The State is now paying \$20.5 million to clean up Zortman/Landusky, a cost that could have been avoided. That money would have been better spent creating non-mining jobs, building youth centers, providing better elder care, constructing a new water treatment plant, funding staff psychologists and counselors to address the high suicide rate, or building a dialysis center.

Mining companies can come and go in the State. The Indian community, as Montanans, stay here and have to protect its homeland. The Council would like to say that it walks hand in hand with all other governmental agencies toward the same goal of keeping the environment healthy.

The Council supports the proposed amendment and supports grandfathering existing mining operations.

Patti Carrywater is the Gros Ventre Mountain District representative on the Fort Belknap Community Council. She grew up in the southern part of the reservation and has witnessed the devastation caused by the mine. As a child, she used to drink water from the riverbed in Mission Canyon. Spirit Mountain is no longer there.

Ken Helgesen asked that the last supplemental environmental assessment be revisited. The supplemental environmental assessment indicated that cattle grazing on the land application site had no effects from what they were eating, although the grass showed that arsenic and selenium exceeded standards. If the cattle are affected, it will pass on to the people consuming the beef.

Dean Stiffarm responded to questions regarding photographs of Swift Gulch. He indicated that the BLM and DEQ are managing the site because there is not a mine operator and that DEQ has not issued a permit for the discharge in Swift Gulch. DEQ would have to issue the permit to itself and be out of compliance.

Dustin Stewart did not defend the actions of Pegasus but indicated that the mining industry has changed and referred to his testimony at a previous hearing. In response to testimony given by the Mineral Policy Center, he indicated that the water coming from the Revett Mine is actually cleaner than the water flowing into the Clark Fork River. There is no perpetual water treatment needed at the Rock Creek or Troy mines.

Dwayne Buck clarified that he is a proponent of the proposed amendment. He asked the BER to clarify who will make the ultimate decision. Chairman Russell indicated the BER has rulemaking authority and will deal with the issue of whether the proposed rule amendment lies within its authority. Chairman Russell also indicated that if a rule amendment is adopted, the legislature has the opportunity to overturn the amendment.

Chairman Russell then concluded the public hearing.

Board of Environmental Review January 10 & 11, 2006, hearings summary approved:

JOSEPH W. RUSSELL, M.P.H.
CHAIRMAN
BOARD OF ENVIRONMENTAL REVIEW

DATE